Evaluation of the waste of medicines through the irrational use of medicines in the residences registered in the Health Unit of the Family Hugo Naves Cansado belonging to the Vila Íris neighborhood located in the municipality of Gurupi — Tocantins

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Abstract—Irrational use of medicines is understood as the process that includes the prescription, dispensing and use of medicines incorrectly. A pharmacy homemade is characterized as a clear example of this practice, cooperating through the storage of medicines in homes for the waste of them, either by a certain amount stored or by drugs with an expired shelf life. Thus, this study aimed to investigate whether there was a waste of medicines from their irrational use in the community living in the Vila Iris neighborhood of Gurupi-TO. This research was characterized as a descriptive exploratory field with qualitative and quantitative analysis. It was carried out with residents living in the Vila Íris neighborhood of Gurupi-TO, registered at the Family Health Unit (FHU) Hugo Naves Cansado, data collection took place from home visits with questionnaire application during July and August 2011. 142 legal guardians of the residences were interviewed, of this 70.42 % were female, in 90.52% of the households participating in the research there was drug storage and the average was 2.41 drugs per household, according to the results from this research it was possible to notice that in the community of neighborhood Vila Iris, Gurupi-TO, there was a waste of medicines. Although most of the drugs present in the researched houses were acquired by medical indication, the possibility of irrational use of medications is not ruled out mainly due to a lack of adequate guidance.

Keywords—Home Pharmacy, Irrational use of medicines, Pharmaceutical product.

I. INTRODUCTION

It is defined by medicine, pharmaceutical product

technically obtained or prepared for prophylactic, curative, palliative, or diagnostic purposes [1, 2].

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It is believed that with the development of the pharmaceutical industries, along with advertising policies that encourage the use of medicines, the lack of supervision of organs, high rates of pathologies that has been affecting as well as society overcrowding the Unified Health System (UHS), contribute to society acquiring drugs improperly, making it susceptible to the irrational use of medicines.

The homemade pharmacy is a clear example of the irrational use of the drug, society acquires more and more drugs, store in their homes and use when they want, that is, make up the medical diagnosis, due to the omission of information on the use of some medication, causing incorrect storage of drugs, which are conducive to physicochemical changes, loss of their therapeutic efficacy and even becoming toxic to health, not to mention providing significant purchasing impairment individuals and the three spheres of government [2, 3].

Thus, this research aimed to investigate whether there was a waste of medicines from their irrational use in the community living in the Vila Iris neighborhood of Gurupi-TO.

II. MATERIALS AND METHODS

This work was characterized as descriptive exploratory field research, containing quantitative and qualitative analysis, which was carried out with residents registered at the Hugo Naves Cansado Family Health Unit in the Vila Íris neighborhood in the municipality of Gurupi, state of Tocantins, data collection took place in July and August 2011. Data were obtained from home visits. The study was conducted in 10% of these households, totaling approximately 202 households that were surveyed. But only 142 legal guardians of the residences were included in this study. Residences registered in the Family Health Unit (FHU) belonging to the Vila Íris neighborhood located in the municipality of Gurupi — Tocantins, whose legal guardians for the households were between 18 and 60 years old and who agreed to participate in the research by signing the Free and Informed Consent Form were included in the research. All households that were registered in FHU of the Vila Íris neighborhood during the period of data collection, all households whose legal guardians were under the age of 18 years or older than 60 years, all legal guardians of the households that refused to participate in the study were excluded, and all residences where legal guardians were not found and/or found closed

until the end of the research, and the researcher returned as many times as necessary. In this research, an interview was conducted using a questionnaire with closed questions, where the following subjects were addressed. The project was evaluated and approved by the Research Ethics Committee of the UNIRG -University Center Gurupi under the number through the process no. 0029/2011 and, by the Municipal Health Department of Gurupi — Tocantins, both allowed its approval to start data collection, obeying resolution 196/96 of the National Health Council (NHC). The final result of the data collection was informed to the Municipal Health Department that is responsible for the FHU Hugo Naves Cansado. This research did not imply compensation or compensation from both parties (researchers and interviewees). The information was analyzed and processed through graphs and tables by descriptive statistical analysis.

III. RESULTS AND DISCUSSION

In this context, we seek to present the compilation of the data obtained during the research carried out in the Vila Íris neighborhood, Gurupi-TO municipality. It is noteworthy that 202 households were used as sampling. Of these 142 participated actively in the research, and 60 were excluded from the research, and 25 responsible for the residences were over 60 years old, 5 were under 18 years old, 22 did not agree to participate in the interview without signing the free and informed consent form and 8 residences were closed until the end of the research. The study was approved by the Research Ethics Committee of the University Center of Gurupi through process No. 0029/2011. Through the critical analysis of the data obtained in this study, the social characteristics of the people interviewed were verified, that is, with regard to gender, level of education, age of the interviewees, and the number of people per residence (Table 1). Thus, it was found that the majority of the respondents were female, in which in the universe of 142 people, 100 were women (70.42%), and 42 (29.58%) were men. (Table 1).

According to the description of Gouvêa (2008) [4], the consumption of medications is related to the sex of the individual. It is that women self-medicate more than men, which is also affirmed by the World Health Organization (WHO) in drugstores in the country. This result according to the same author is due to several

factors, among them the social role of women in wanting to provide family health. As far as education is

related, 25.35% (36) of the sample surveyed had incomplete 1st degree, 23.94% (34) complete 2nd degree, 18.31% (26) 1st complete degree, 11.27% (16) incomplete 2nd degree, 10.56% (15) complete 3rd degree,

4.93% (7) 3rd degree incomplete, and 5.63% (8) were incomplete, and 5.63% (8) were illiterate (Table 1). Because of these data, it can be perceived that the majority of the population surveyed is not functionally illiterate, that is, it has more than four years of complete studies presenting a reasonable level of education, that is, on average, and the majority has schooling between

1° complete degree and 3rd degree complete. According to site Educação Brasil (2011) [5] and IBGE (2002) [6] it should be considered that functional lye, every person who is over 20 years of age and has not completed 4 years of formal study, as well as, does not

know how to write his name, or simple sentences, does not know how to perform basic mathematical calculations, and yet, cannot interpret what he reads, or use this knowledge in his experience [7].

Brazil in 2002 had a percentage of 26% of functionally illiterate, while in 2009 this rate was for 9.7% of illiterate. This result can be considered good, taking into account data from previous years that showed a rate of 36% of functionalities [5, 6].

Regarding the age of the person responsible for the residence, more than half of the respondents were aged between 51-60 years, reaching a percentage of 36.62% (52), 23.94% (34) were in the age group of 29-39 years, already 18-28 years and 40-50 years had the same percentage, 19.72% (28) (Table 1).

Table 1: Social characteristics of the interviewees registered in the Family Health Unit (FHU) Hugo Naves Cansado and residents in the Vila Íris neighborhood of Gurupi - TO.

| Variable | Interviewed (N°) | Percentage (%) |
|--|------------------|----------------|
| Sex | | |
| Male | 42 | 29.58 |
| Female | 100 | 70.42 |
| Total | 142 | 100 |
| Level of education of the legal guardian | | |
| No schooling | 8 | 5.63 |
| Incomplete 1st grade | 36 | 25.35 |
| Complete 1st grade | 26 | 18.31 |
| Incomplete 2nd degree | 16 | 11.27 |
| Complete 2nd grade | 34 | 23.94 |
| Incomplete 3rd degree | 7 | 4.93 |
| Complete 3rd degree | 15 | 10.56 |
| Total | 142 | 100 |
| Age of the responsible | | |
| 18 to 28 | 28 | 19.72 |
| 29 to 39 | 34 | 23.94 |
| 40 to 50 | 28 | 19.72 |
| 51 to 60 | 52 | 36.62 |
| Total | 142 | 100 |
| Number of people living in the household | | |
| One | 10 | 7.04 |
| Two | 19 | 13.38 |
| Three | 31 | 21.83 |
| Four | 40 | 28.17 |
| More than four | 42 | 29.58 |
| Total | 242 | 100 |

According to IBGE data 'b' (2010) [8], show that in the country there was a considerable growth of people aged 65 years or more, going from a percentage of 4.8%

in 1991, to 7.4% in 2010. In this sense, it was noticed that the data from the research conducted in the Vila Iris neighborhood, Gurupi municipality

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— state Tocantins, have a certain consonance concerning the data of the rest of the country, regarding the number of people over 50 years of age, an index higher than the other ages.

Regarding the number of people living in the households visited, it was found that 42 households (29.58%) there were more than 4 individuals in 40 households (28.17%) there were 4 individuals in 31 households (21.83%) 3 individuals, 19 households (13.38%) 2 individuals, and 10 households (7.04%) only 1 individual. (Table 1)

When analyzing these data, it was noticed that in the Vila Íris neighborhood most of the family groups were composed of 4 or more members, thus reaching a percentage of 57.75% (82) of respondents who answered between 4 and more than 4 people per residence (Table 1).

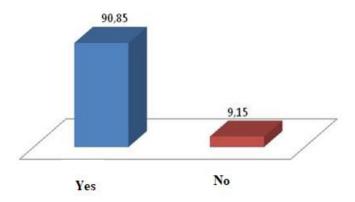
These data differ from those indicated by IBGE, concerning the general index of the country, which is an approximate number of 3 people per family [9].

During the interview, it was questioned whether there was the storage of medicines in the homes surveyed, and 90.85% (129) of the interviewees said yes, while 9.15% (13) answered no. This research is in line with the work carried out by Schenkel (2004) [10], which shows that of 101 respondents, 98 people were found medicines in their homes.

Graph 1: Percentage of storage of medicines in homes by the interviewees registered at the Family Health Unit (FHU)

Hugo Naves Cansado and domiciled in the Vila Íris neighborhood of Gurupi - TO.

You store medicines in your home



According to Tourinho (2008) [2], storing medicines in homes is common practice, however, this practice may represent a health risk, since people do not know the correct way to store the drugs.

Still, in this same line of thinking, Margonato (2008) [11], also, the accumulation of medicines stored in homes may be related to the shortage of medicines in the Public Health System, causing the patient to acquire an unnecessary amount of medicines before they are missing in public health units or even acquiring through self-medication in pharmacies and/or drugstores, preventing the lack of drugs in the future.

According to Lima (2010) [12], families keep a large number of medicines considered indispensable, and this can increase the risks of intoxication due to improper ingestion, drug exchange, error with the therapeutic indication, among others.

Also, the considerations described by Brandão

(2010) [13], when he points out that 25% to 30% of medicines stored at home is wasted, due to their loss of validity.

Also, concerning the data showing that most of the respondent's stored medicines at home as shown in Graph 1, Costa (2007) [14] states that among the factors that contribute to the indiscriminate consumption of medicines in Brazil, is the low-level education of the Brazilian population. However, the description made by Costa (2007) [14] is in disagreement with the results found in this research, which shows that approximately 50.70% of the interviewees had more than 4 years of complete studies (Table 1).

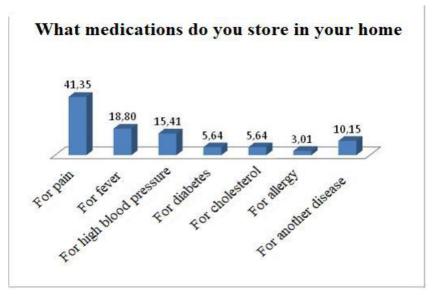
On the other hand, the line of thought of Villarino et al., (2005) [15] should be considered when he states that the higher incidence of medication consumption is intrinsically related to the higher level of education of people since in the view of this author, people with a

higher degree of knowledge are more confident to selfmedicare. Thus, it is believed that this last explanation is more in line with the data of this research because those with higher education are the ones who store drugs in their homes the most (Table 1, Graph 1).

When questioning which medications, the interviewees kept in their homes, it was found that the drugs used for pain and fever reached higher rates than those destined for other pathologies. Thus, 41.35%

(110 people), fever 18.80% (50 people), hypertension 15.41% (41 people), diabetes 5.64% (15 people), cholesterol 5.64% (15 people), allergy 3.01% (8 people), and for other diseases reached a percentage of 10.15% (27 people). These values are data from a universe of 129 people who claimed to have medicines at home. Also, these 129 people had the option of multiple choice giving the right to inform all medicines used in their homes (Graph 2).

Graph 2: Percentage of which drugs were stored in the residences by the interviewees registered at the Family Health Unit (FHU) Hugo Naves Cansado and domiciled in the Vila Íris neighborhood of Gurupi - TO.



As described by Rocha (2009) [16] the presence of analgesics and antipyretics in homes is common because these serve as first aid for rapid treatments of everyday diseases such as headaches, and fever, since these remedies are only used when there is a need. Another point that can influence the growth of these drugs in homes is the free sale in pharmacies and drugstores.

Concerning the high rates of hypertensive patients, this reality is not unique in the Vila Iris neighborhood, but the rest of the country. According to the site Portal da Saúde (2004) [17], the rate of hypertensive patients in Brazil is 35% of the population over 40 years of age. This information is in line with the research conducted because, in this, it was perceived that most of the interviewees are aged between 40 and 60 years, and still 15.41% (41) make use of antihypertensives drugs, an amount considered significant.

Still, in this bias, it was found that recent studies confirm that the rate of hypertensive patients in Brazil has grown, because according to the Brazilian Society of Hypertensive Patients, this pathology affects about 25% of the Brazilian population, reaching 50% in the third [18].

It should be taken into account that part of these medicines stored at home was of continuous use as the case of antihypertensives and, antidiabetics, that these may be being used correctly or not.

According to data provided by Tourinho (2008) [2], 50% of all drugs used in the world are prescribed, sold, dispensed, or used incorrectly.

Also, in this keynote, who can contribute is Fazio (2011) [19], when he emphasizes that the main causes for the self-index of drug intake throughout Brazil may be the lack of knowledge of users, the wide access to medicines in drugstores and the self-medication. The idea of this author can confirm the result obtained in the research, thus justifying the large number of medicines stored in the visited homes.

According to research conducted in Porto Velho

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(RO) on indiscriminate use of medications practically all medications used in the context of self-medication belong to the groups of antibiotics, analgesics, vitamins, and contraceptives [20].

Of the 90.85% (129) individuals interviewed, when asked about the number of medicines stored in the households surveyed, 29.46% (38 people) reported having only one drug stored in their home, 28.68% (37 people) only two, 12.40% (16 people) only three, and 29.46% (38 people) from four. It can be seen that in all households they had at least one medication and that most of them had more than three stored medicines (Graph 3).

Also in the context of the information related to Graph 3, when compiling the data, it can be observed that 38 people kept 38 drugs, 37 people kept 74 medicines, 16 people kept 48 medicines, and when they answered that they stored the from four drugs (only 4 drugs were taken into account), 38 people kept 152 drugs, reaching a total of 312 drugs in the 129 households surveyed, an average of 2.41 drugs per household. The presence of the high number of drugs in the homes of the people surveyed can be supported by

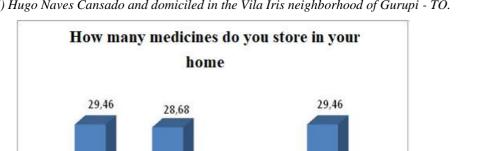
Lyra (2003) [21] when he states that the Brazilian population has easy accessibility to medicines.

Others that can also contribute to this same assertion are the WHO and the ministry of health when they inform data that the Brazilian drug trade provides more than 32,000 medicines, one of the reasons for classifying Brazil in the sixth position among the countries that lead the ranking of drug consumption [3].

According to Brandão (2010) [13], Brazil consumed in 2009 the equivalent of 2000 kilos of the type of appetite suppressant sibutramine. This indicator corresponds to that of every thousand inhabitants in the country, one consumed three doses of drugs per day.

Most Brazilians have drugs in their homes, and the amount is accumulated in such a way as to constitute a homemade pharmacy [22].

Margonato (2008) [11], stresses that the percentage of medicines stored in homes can be attributed to dependence on the health service as well as in the shortage of medication in the public health system, as previously mentioned.



12,40

Only three Above four

Graph 3: Percentage of how many medicines were stored in homes by the interviewees registered at the Family Health Unit (FHU) Hugo Naves Cansado and domiciled in the Vila Íris neighborhood of Gurupi - TO.

Regarding the way of storing medicines in the researched homes, it was possible to verify that the majority of the interviewees stated that their medications came from medical indication, reaching a percentage of 56.59% (73 people). Those who said that the drugs were not indicated by the doctor reached a percentage of 43.41% (56 people) of the interviewees (Table 2).

Only one Only two

Also, about medicines stored in homes, that is, those indicated by physicians, the following order could

be observed: 41.10% (30) of the people stored only 1 drug, 19.18% (14 people) two types of medications, 24.66% (18 people) three types of drugs, 15.07% (11 people) from four drugs (Table 2).

The research conducted by Bueno (2009) [22] shows that most of its respondents practice self-medication, which differs from this research since the majority of people interviewed 56.59% (73) used prescription drugs.

However, Aquino (2008) [23] reports in his research that 35% of the drugs sold in Brazil are the fruits of self-medication, which is in some ways in line with this study because it exposes that less than half of the interviewees did not use a medical prescription to acquire some kind of drug. Carmeli (2001) [24], emphasizes in his article that self-medication is a very

common practice in Brazil, as well as in other countries, also argues that, this is a means that the patient uses to find immediate relief to his pathologies. However, this can mask the diagnosis, thus making it difficult to elucidate the true disease.

Table 2: Data on the storage of medicines by the interviewees registered in the Family Health Unit (FHU) Hugo Naves

Cansado and domiciled in the Vila Íris neighborhood of Gurupi – TO.

| Variable | Interviewed (N°) | Percentage (%) |
|--|------------------|----------------|
| Have the medicines stored in your residence been indicated | | |
| by the doctor? | | |
| Yes | 79 | 56.59 |
| No | 56 | 46.41 |
| Total | 129 | 100 |
| How many medicines stored in your home have been indicted by the doctor? | | |
| Only one | 30 | 41.10 |
| Only two | 14 | 19.18 |
| Only three | 18 | 24.66 |
| From four | 11 | 15.07 |
| Total | 73 | 100 |
| Do you know how to use the medicines stored in your home? | | |
| Yes | 121 | 93.80 |
| No | 8 | 6.20 |
| Total | 129 | 100 |
| How many medicines are being stored in your home that you know how to use? | | |
| Only one | 50 | 41.32 |
| Only two | 26 | 21.49 |
| Only three | 23 | 19.01 |
| From four | 22 | 18.18 |
| Total | 121 | 100 |
| Are the medicines in your home being stored correctly? | | |
| Yes | 109 | 84.50 |
| No | 20 | 15.50 |
| Total | 129 | 100 |

According to Costa (2007) [14], the data presented in his research state that, among the majority of

respondents, some obtained prescription drugs, data that, although they were made in another region of the

country, are in line with the data of this research, because it also presents a higher rate of medicines acquired through a prescription.

It is important to add in this line of thought that the use of medications in a rational way, that is, respecting the medical prescription is of great importance, because patients, in addition to receiving medications appropriate to their clinical needs, are the right dose, and the time of use of each drug [23].

Regarding the medicines stored in the homes, of the 129 interviewees who stored medicines in their homes, 121 (93.80%) reported knowing how to use them, and only 8 (6.20%) said they didn't know how to use it. When the number of drugs that stressed knowing how to use the drugs was questioned, the vast majority, a percentage of 41.32% (50 people) stated that they know how to use only one, secondly, were those who said they knew how to use only 2, representing a percentage of 21.49% (26 people); in sequence, 19.01% (23 people) only three medications, and 18.18% (22 people) from four medications (Table 2).

Although the above-mentioned information presented a data in which it shows that the majority of respondents know how to use medicines, this is not a reality in global terms, because, in this sphere, the absence of information about medicines is one of the causes that the individual does not adequately comply with his treatment [3].

In the opinion described by Salviano (2008) [25], the patient's knowledge about the use of medications plays an important role in the efficacy of its treatment, as it reduces the risks of drug-related problems and potentiates the best therapy.

Regarding the location of the storage of medicines in the households, it can be verified in this research, according to the opinion of the majority of the interviewees, that the drugs were stored in correct places, reaching a percentage of 84.50% (109), on the other hand, on the other hand, the view of 15.50% (20) of the respondents stated that they did not know how to store the drugs correctly (Table 2).

In this bias, it was verified that the drugs were stored in different locations of the residences visited. In the kitchen cabinet was the place where 48% (62 of the people) reported storing, 25% (32 people) said they kept in the room inside the wardrobe, 10% (13 people) said they kept it on the refrigerator, 9% (11 people)

said they kept it in the room on the table, 8% (10 people) said they kept medication in another unidentified place,

already in the room on a table, only one person and in the bathroom, no person kept medication (Table 3).

According to Seraphim (2007) [26], all medicines should be stored in places protected from light, moisture, heat, and radiation. Among the places that should not be stored are the sinks, bathrooms, cabinets near the windows, stoves, as well as, should not stay together with food.

According to Lima (2010) [12], the data from his research state that the drugs were found in places exposed to light, heat, and humidity, and 50% of the interviewees said they kept the drugs in the closet and 37% exposed in places such as walls, the balcony of the sink of the kitchen, on the fridge and the table. These data, which are in line with part of the data presented in the research conducted in the neighborhood Vila Iris municipality of Gurupi — TO, when referring to the places of storage of medicines such as, on the refrigerator, on the table, and the kitchen cabinet, once that these locations may be exposed to high temperatures.

Another scholar who can corroborate this understanding is Tourinho (2008) [2] when in his considerations points out that the home pharmacy is deposited in inappropriate environments, for him, this may favor the possibility of irrational consumption, waste, and risk of toxic exposures.

Regarding the usefulness of each drug stored in the researched households, 113 (87.60%) respondents answered that they knew its purpose and only 16 people (12.40%) didn't know. And to better clarify the level of knowledge of the interviewees regarding the drugs stored in the homes, we were also asked about the number of medications they knew about their service. In this keynote, it was found that 39 people (34.51%) stated that they knew only 01.30 people (26.55%) said they knew only two, 15 people (13.27%) said they knew only three, and 29 people (25.66%) stated that they knew the usefulness of four or more medicines in their homes (Table 3).

It is believed that the interviewees knew the drugs because they stated as can be seen in Table 2 that most of the drugs stored in their homes were obtained by medical indication. However, the interviewees' answers as to what the drug is for does not mean that they will use the drugs correctly since basic guidance on dosage, time of use, interactions are necessary. How to follow the treatment to the end and in most cases the diagnosis of a doctor. Another point that deserves to be highlighted is that the care provided by the doctor or other health

professional in some cases does not mean that the patient has received the necessary and correct guidance for the rational use of medications, since research many unprepared health professionals [25].

Table 3: Data on the storage of medicines by the interviewees registered at the Family Health Unit (FHU) Hugo Naves

Cansado and domiciled in the Vila Íris neighborhood of Gurupi-TO.

| Variable | Interviewed (N°) | Percentage (%) |
|--|------------------|----------------|
| Do you know what each drug is being stored in your home? | | |
| Yes | 113 | 87.60 |
| No | 16 | 14.40 |
| Total | 129 | 100 |
| Of the medicines stored in your home, how many do you know what it's | for? | |
| Only one | 39 | 34.51 |
| Only two | 30 | 26.55 |
| Only three | 15 | 13.27 |
| From four | 29 | 22.48 |
| Total | 113 | 100 |
| Why do you store medicines in your home? | | |
| Lack of knowledge about the dangers of use | 1 | 0.78 |
| For prevention of an unexpected disease | 66 | 51.16 |
| Leftover drugs due to treatment abandonment | 5 | 4 |
| Leftover medicine dispensed too much | 16 | 12.40 |
| You have a disease and need to use medication | 29 | 22.48 |
| Other | 12 | 9 |
| Total | 129 | 100 |
| How do you store medicines in your home? | | |
| In the kitchen cabinet | 62 | 48 |
| On top of the fridge | 13 | 10 |
| In the room on the table | 11 | 9 |
| In the room inside the wardrobe | 32 | 25 |
| In the bathroom | 0 | 0 |
| In the room on a table | 1 | 1 |
| Elsewhere | 10 | 8 |
| Total | 129 | 100 |

According to Saez (2004) [27], the pharmacist has the role of correctly guiding the consumer on the rational use of medicines and thus avoiding the incorrect and excessive use of medicines. It is also the responsibility of this professional to make sure that the patient has received the necessary information on how to use the drug, and advise him to always seek medical help when the symptoms are unclear or the pathology persists.

According to a survey conducted by Serafim (2007) [26], its interviewees responded by using the medical prescription, and the package leaflet as an instruction for the use of medications. Vieira (2011) [28] supports the same idea that some people seek leaflets to acquire knowledge about the use of medications.

According to Aquino (2008) [23], some people ignore the health risk when mixing various medications, thus failing to inform the doctor under the use of some other drug. Continuing with the results obtained in the research, it is important to point out that the reasons that the interviewees kept medicines at home, in increasing order were the following. One person (0.78%) answered storing medicines at home due to lack of knowledge about the dangers of incorrect use of the same, 66 people (51.16%) reported storing medicines in their homes for prevention, 5 people (4%) reported leftover drugs due to treatment abandonment, 16 people (12.40%) leftover medicines by dispensing above the necessary. Already 29 people (22.48%) answered to store medicines because they were continuously using drugs for hypertension, diabetes and/or cholesterol and thus kept medicines at home, and 12 people (9%) answered that they had another reason to store medicines at home (Table 3).

Although the results of the research show that only one person stores medicines at home due to lack of knowledge, Fanhani (2006) [3] describes in his work that the lack of information about medications is one of the most significant causes for the abandonment of medical therapy. And it is known that abandoning medical treatment most often can result in the storage of drugs in homes.

According to Carmeli et al., (2001) [24], people in search of a cure, treatment, prevention, and other

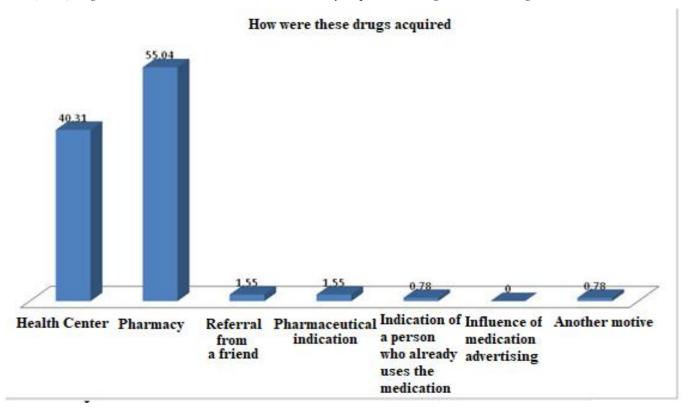
factors, driven by the ease and speed of access to drugs, make this need and supposed knowledge the practice of self-medication. This item denotes the results of the research where it showed that the majority of people 51.16% (66) used prevention as a factor to store medicines at home.

Following the results obtained in research, it can still be observed in Table 3, about the storage of drugs, it was perceived that in the item leftover from medications due to treatment abandonment, only 5 people (4%) reported having medicines for this reason. This result was considered insignificant by the researcher, equating with the results obtained for other reasons of the leftover. However, attention was focused on this subject due to national information described by Aquino (2008) [23], where it reports that 50% of the prescribed drugs are performed incorrectly. It may be a factor for treatment abandonment.

Regarding the item leftover from medicines, due to the same dispensed above the amount necessary for the treatment of the patient expressed in table 3, it can be verified that there was an expressive index, totaling 16 people (12.40%). In this sense, it was noticed that these data reinforce the real objective of one of the measures that the federal government adopted to solve the problem of prescription of medicines over dispensed. This measure, which edits law no. 5348 of January 20, 2005 on the sale of fractional drugs, thus preventing the leftover of drugs, and dispensation in the exact amount prescribed by the doctor [29].

The results of this research showed that 29 people (22.49%) (table 3) that kept medicines at home were because they made continuous use of them. On the other hand, when asked about which drugs stored at home, adding antihypertensives and, antidiabetics (graph 3) a percentage of 26.69% of respondents were obtained. This small observed difference in values of continuous use medications can be attributed to several reasons, among these, the lack of truthfulness or omission in the information presented by people when answering the questionnaire, or even being able to forget their pathology or their dependents and thus not report the correct information.

Graph 4: Index of people interviewed and domiciled in the Vila Íris neighborhood registered with the Family Health Unit (FHU) Hugo Naves Cansado when asked about how they acquired the drugs that were being stored in their homes.



If we look at graph 4, we can appreciate how the interviewees acquired the drugs stored in their homes, thus, we observed that 55.04% (71) reported acquiring in the pharmacy, 40.31%, (52) at the health center, 1.55% (02) by indication of a friend and/or a pharmacy clerk (reached the same percentage), 0.78% (1) by indication of a person who used the drug and/or obtained medications influenced by another reason (the same percentage achieved) and no person reported that he obtained alcohol sway due to advertisements.

Most respondents reported purchasing drugs in the pharmacy (Graph 4) and said they store drugs to prevent diseases (Table 3) however it can be assumed that part of these acquisitions may be the result of self-medication. Jacome (2011) [30] reports that 50% of the sales of traditional medicines in the Brazilian market are self-medication and/or the shortage of farms in the public health system, providing the demand for pharmacies and/or drugstores.

This information shows us how important the presence of the pharmacist in pharmacies and drugstores, both to avoid the indiscriminate sale, as well as to provide a responsible dispensing, ensuring the health of the client, avoiding waste of medicines through the

storage of home pharmacies, the famous "homemade pharmacy" and also reducing expenses for both the use of medicine and public coffers [13].

The second place that the interviewees of the Vila Íris neighborhood reported acquiring their medicines was in the health posts, these data may probably be related to the social class of the population in question, where it appeared to be a class of low purchasing power, and thus would justify making use of the public health system.

The percentage of people who purchased their medications by indication of a friend, indication of a pharmacy clerk, and another person who used medication, is small, however, it is relevant to address this issue, because it was perceived that there were still people without information, lay for the dangers of self-medication, and who needed conscientization by the competent government authorities. Also, in this Brandão theme (2010) [13], it states that the practice of pharmaceutical care because it is not widespread and consequently not fully enjoyed by the Brazilian population, possibly by the culture of the country and the lack of the professional contribution to the waste of medicines.

Regarding the influence that advertisements

provided in the acquisition of medicines, the people interviewed did not consider this option valid, however, this information contrasts with the data described by Jesus (2009) [31], which shows that one of the main causes of drug use in Brazil is the influence that drug advertisements have on the population, causing people to buy medicines without consulting a health professional. In consonance Fanhani (2006) [3] reports that drug advertisements are one of the factors that contribute to the use of drugs without a prescription.

IV. CONCLUSION

Through the results of this research, it was possible to notice that in the community of Vila Iris neighborhood, Gurupi municipality - TO, there is, yes, waste of medicines. Although most of the drugs present in the researched houses were acquired by medical indication, the possibility of irrational use of medications is not ruled out, mainly due to a lack of adequate guidance. At the heart of this work, it was understood that the full-time presence of a pharmaceutical professional in the health center of the region in question is of great relevance, as it will provide the local community with quality care concerning dispensing medicines. In summary, the presence of a pharmaceutical professional at the health center will provide effective pharmacotherapy to the patient.

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